

ABSTRACT

Lanthanide complexes, preparation thereof and uses thereof

The invention relates to compounds, to the complexes they form with a lanthanide, and to the use of the complexes for fluorescence marking or NMR imaging.

The complex consists of an Ln ion and a ligand $R^2-C(X-R^1)(R^3)-NR^4R^5$. R^1 is a functional group, X is a single bond or a hydrocarbon-based chain consisting of at least one alkylene or alkenylene group optionally comprising at least one hetero atom or an arylene. R^2 is an anionic group A^2 or a C_1-C_4 alkylene or alkenylene group bearing at least one such group A^2 and optionally comprising at least one hetero atom. R^3 is H or a C_1-C_5 alkylene or alkenylene group optionally containing at least one hetero atom, and optionally bearing at least one anionic group A^3 . R^4 is a substituent with light-absorbing properties that forms chelate rings with Ln. R^5 is a substituent that forms chelate rings with Ln.